

Architecture and Building

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Hospital Planning

By Frank Peck, F.R.I.B.A.

I.—ECONOMY, EQUIPMENT AND DEVELOPMENT

The planning of hospitals depends upon the close consideration of many matters of detail and of equipment; and, consistently with their efficiency and durability, the greatest economy should be exercised in the building works. Elaboration of detail for outside effect is out of place for such buildings, and the employment of much applied enrichment is a waste of money. The skilful grouping and proportioning of the buildings should be relied upon to give the simple dignity which is all that is required for such buildings to express.

In the light of the added knowledge and of the wider experience as time passes, of the medical staff, the plans of hospitals are constantly changing, and their schemes in every way should be constantly studied and developed in that light; planning upon those lines, those in whose hands lie the recovery or the improvement of the patient, can be materially assisted in their work by the arrangement of the buildings. The "lay-out" or disposition of the buildings over the site has far reaching and definite consequences—every site has its problem the proper placing of the various blocks in regard to aspect and the prevailing winds, convenient positions for administration and service, their juxta-position or definite separation, such points require in the very preliminary stages much thought and consideration. The better the lay-out the more economy in service, and the less can be the cubic space per bed, together with the relative cost.

In equipping a hospital, a great actual economy is the expenditure necessary to obtain perfect scientific equipment—not excluding that applied to research work. The purpose of the doctor is to cure the patient and get him completely well, so that he shall not return (with the same disease at any rate) and, with the aid of available scientific methods, to make a study of the case which will enable the next similar case to receive advanced treatment. A hospital cannot afford to be without this perfect—albeit costly—scientific equipment.

Most new hospitals are based upon a careful study of contemporary designs and the development of those from their prototypes. The greatest changes of plan and treatment in both Europe and America have been brought about by experience during great wars, the Crimea, Franco-German and the American Civil War; and now the present great war has instituted the full extension of the "open-air treatment" adopted for many ailments some years ago, which treatment has come to stay. All our hospitals must be modified accordingly.

As the result of insufficient "bed" room to receive the wounded or sick by the war, patients have overflowed into places not originally intended for them, such as open corridors, annexes, sheds, tents, and indeed into the open air with little protection save cover and such moveable screens or temporary walls as are necessary to check the draughts. The speed and percentages of recovery under the open air conditions have caused the present general adoption of the treatment as the best for many ailments. The heat of the human body (protected from wet and damp) in a pure atmosphere is capable of adjustment to wide variations of temperature; and, provided that there is no attempt to lead the dual life of indoor and outdoor temperature at the same time, the advantages of the open air treatment have been proved.

Much economy will therefore follow in large hospitals—in suitable climates by way of less permanent building than heretofore, or in other words with a nucleus of permanent building which can be extended on emergency by introducing temporary adjuncts, coverings, and movable screens to balconies and corridors, providing sites, etc., only for auxiliary tents or other lightly constructed and less permanent shelters.

II.—SITE, LAY-OUT AND ASPECT

Every site has its problem or "secret" as the experts would say; and the discovery of the best solution (by seizing upon the advantages and discounting in effect the drawbacks) determines the ultimate success of any scheme. The local features and conditions appertaining to the site have to be kept clearly in view. Hence the impossibility of attaining real success by merely repeating or directly re-using standardized plans issued by Government Departments; but their data and principles can be worked to, being merely applied for adaptation to each special case.

Each scheme therefore, has to be drawn individually and submitted to the official experts for criticism and recommendations which we always welcome, and when the plans have been finally approved they go forward for tenders and execution.

The ideal site for a General Hospital should lie on elevated ground in the pure air outside the town but within easy reach of the population served by it and of the medical staff: it is best when surrounded on all four sides by roads which act like "clearing flues" to it; sloping gently towards the sun; lying high and dry above sub-soil water, or water logged ground; and above all traversed by wind currents, which, with the sunshine can be "harnessed up" for the benefit of the patients and staff and all persons accommodated thereupon. If the site be limited in area, it follows that the narrower the depth—the more it is elongated at the expense of depth—the greater the skill required to attain perfection in the lay-out; for it is necessary